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EXAMINER
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BURGESS, BARBARA N

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2157

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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### DETAILED ACTION

This Office action is in response to amendment filed February 8, 2008. Claims 1, 38-76 are presented for further examination.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 38-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menditto et al. (hereinafter "Menditto", US Patent 6,981,029 B1) in view of Hospodor (US Patent Application Publication 2003/0021282 A1).

As per claim 1, Menditto discloses a method for managing service, said method comprising:

- receiving a request for a service from a client, said service comprising a service component (col. 4, lines 28-40, Menditto discloses a client terminal requesting content from a server in which the request includes the type of content with a jpeg component to service the request);
- selecting a service location manager (i.e. content gateway) to which to provide said request from a plurality of service location managers (col. 3, lines 11-17 and lines 40-61, Menditto discloses a content gateway that locates the best server to service the content request from the client terminal); and

- selecting a service provider (i.e. content provider) to which to assign said service component from a plurality of service providers of a network, wherein said selecting said service provider is performed by said service location manager (col. 3, lines 62-67, col. 4, lines 1-17, Menditto discloses the content gateway selecting from content delivery nodes or content provider servers that is close to client terminal to service the request).

Although the system disclosed substantial features of the claimed invention, it does not explicitly disclose:

- a streaming media service; and
- informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on streaming media.

Hospodor discloses a system for servicing streaming media request comprising:

- a streaming media service (paragraphs 0012, 0014 and 0026, Hospodor discloses receiving a streaming media request); and
- informing said service provider (i.e. stream engine node) of said assignment to perform said media service component, causing said service provider (i.e. stream engine node) to prepare to perform said streaming media service on streaming media (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **38**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising identifying information of a service location manager among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request); and
- selecting said service location manager according to said record (col. 11, lines 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **39**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising a prioritized list of at least one service location manager among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway

which contains a list of server addresses that are capable of servicing the client request); and

- selecting said service location manager according to the order of priority of said list of said record (col. 11, lines 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **40**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request); and
- selecting said service location manager randomly from said record (col. 11, lines 57-67, Menditto discloses selecting a server that best satisfy the client request).

As per claim **41**, Menditto discloses wherein said selecting said service location manager comprises:

- maintaining a record comprising identifying information for a set of service location managers among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the

content gateway which contains the address of servers that are capable of servicing the client request); and

- selecting said service location manager in a round robin manner from said record (col. 11, lines 57-67 and col. 13, lines 27-35, Menditto discloses selecting a server that best satisfy the client request).

As per claim **42**, Menditto discloses:

- wherein said selecting said service location manager comprises a comparison of processing loads of at least two service location managers among said plurality of service location managers (col. 3, lines 51-61, Menditto discloses selecting a server to process the request by determining the load on each server).

As per claim **43**, Menditto discloses:

- wherein said selecting said service location manager comprises a comparison of available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (col. 4, lines 61-67 and col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim **44**, Menditto discloses:

- wherein said selecting said service location manager is based on an estimate of a network communication condition between two entities connected by the network (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a server that is closer to the client terminal to handle the request).

As per claim **45**, Menditto discloses:

- wherein said estimate of said network communication condition is associated with said client (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a server that is closer to the client terminal to handle the request).

As per claim **46**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said estimate of said network communication condition is associated with a content source of said streaming media.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said estimate of said network communication condition is associated with a content source of said streaming media (paragraph 0026, Hospodor discloses a stream director node determining if there is sufficient resources available on the stream engine node to service the request).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by determining the available resources



located on the service provider (i.e. stream engine node) in order to service the request by the requestor for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **47**, Menditto discloses wherein said selecting said service location manager is based on one of the group consisting of:

- pending service application request queue length of a service location manager, expected latency of a service location manager for assigning said service request, and available network communication bandwidth of a service location manager (col. 15, lines 25-34, Menditto discloses selecting service node based on bandwidth allocation).

As per claim **48**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- notifying a second service location manager among said plurality of service location managers of the assignment of said service provider to perform said media service component.

Hospodor discloses a system for servicing streaming media request comprising:

- notifying a second service location manager among said plurality of service location managers of the assignment of said service provider to perform said media service component (paragraphs 0026-0028 and 0036, Hospodor

discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **49**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- notifying a second service location manager among said plurality of service location managers of the completion of performance of said media service component.

Hospodor discloses a system for servicing streaming media request comprising:

- notifying a second service location manager among said plurality of service location managers of the completion of performance of said media service component (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing

and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **50**, Menditto discloses:

- a second service location manager assuming the role of said service location manager if said service location manager is determined to be non-responsive (col. 2 , lines 53-67).

As per claim **51**, Menditto further discloses:

- maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

However, Menditto does not explicitly disclose:

- notifying said set of service location managers according to said record of said assignment of said service provider to perform said media service component.

Hospodor discloses a system for servicing streaming media request comprising:

- notifying said set of service location managers according to said record of said assignment of said service provider to perform said media service component

(paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **52**, Menditto discloses:

- wherein said maintaining and said notifying is performed by said service provider or said service location manager (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

As per claim **53**, Menditto further discloses:

- maintaining a record comprising identifying information of a set of service location managers among said plurality of service location managers, each service location manager of said set of service location managers supervising said service provider (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

However, Menditto does not explicitly disclose:

- notifying said set of service location managers according to said record of the completion of performance of said media service component by said service provider.

Hospodor discloses a system for servicing streaming media request comprising:

- notifying said set of service location managers according to said record of the completion of performance of said media service component by said service provider (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **54**, Menditto discloses:

- wherein said maintaining and said notifying is performed by said service provider or said service location manager (col. 3, lines 11-17 and lines 40-61, Menditto discloses a content gateway that locates the best server to service the content request from the client terminal).

As per claim **55**, Menditto discloses:

- wherein said service provider is supervised by more than one service location manager among said plurality of service location managers (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains the address of servers that are capable of servicing the client request).

As per claim **56**, Menditto discloses a system for providing streaming content to a client device, said system comprising:

- a plurality of service location managers (col. 2, lines 54-55);
- a plurality of service providers (col. 2, lines 54-55),

However, Menditto does not explicitly disclose:

- each service provider capable of performing a service on an item of streaming input content to produce said streaming content; and
- a portal providing a first point of contact for said client device, said portal for receiving from said client device a request for performance of said service on an item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider of said assignment to perform said service on said streaming input content to produce said streaming content.

Hospodor discloses a system for servicing streaming media request comprising:

- each service provider capable of performing a service on an item of streaming input content to produce said streaming content (paragraphs 0012, 0014 and 0026, Hospodor discloses receiving a streaming media request); and
- a portal providing a first point of contact for said client device, said portal for receiving from said client device a request for performance of said service on an item of streaming input content, said portal for selecting a service location manager to which to provide said request from said plurality of service location managers, said service location manager for receiving said request from said portal and for selecting a service provider from said plurality of service providers and informing said service provider (i.e. stream engine node) of said assignment to perform said service on said streaming input content to produce said streaming content (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns and selecting a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **57**, Menditto discloses:

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- wherein said portal maintains a record comprising a prioritized listing of at least one service location manager among said plurality of service location managers and selects said service location manager in order of priority according to said prioritized listing (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains a list of server addresses that are capable of servicing the client request).

As per claim **58**, Menditto discloses:

- wherein said portal maintains a record comprising identifying information of a set of service location managers among said plurality of service location managers and selects said service location manager in a round robin manner from said record (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains a list of server addresses that are capable of servicing the client request).

As per claim **59**, Menditto discloses:

- wherein said portal selects said service location manager by comparing processing loads of at least two service location managers among said plurality of service location managers (col. 3, lines 51-61, Menditto discloses selecting a server to process the request by determining the load on each server).

As per claim **60**, Menditto discloses:



- wherein said portal selects said service location manager by comparing available resources of a first set of service providers supervised by said service location manager and available resources of a second set of service providers supervised by a second service location manager (col. 4, lines 61-67 and col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim **61**, Menditto discloses:

- wherein said portal selects said service location manager based on an estimate of a network communication condition between two entities connected by the network (col. 3, lines 62-67 and col. 4, lines 1-17, Menditto discloses selecting a server that is closer to the client terminal to handle the request).

As per claim **62**, discloses Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service location manager notifies a second service location manager among said plurality of service location managers of said assignment of said service provider to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said service location manager notifies a second service location manager among said plurality of service location managers of said assignment

of said service provider to perform said service (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **63**, Menditto discloses:

- wherein said portal determines if said service location manager of said plurality of service location managers is non-responsive (col. 2 , lines 53-67).

As per claim **64**, Menditto discloses:

- wherein said portal activates a second service location manager of said plurality of service location managers to assume the role of said service location manager, provided said portal determines said service location manager to be non-responsive (col. 2 , lines 53-67).

As per claim **65**, Menditto discloses:

- wherein said service provider is supervised by more than one service location manager of said plurality of service location managers (col. 4, lines 61-67 and

col. 4, lines 1-8, Menditto discloses determining which of the content providers have the information resources before selecting a server to handle the client request).

As per claim **66**, Menditto discloses:

- wherein said service provider maintains a record comprising identifying information of service location managers that supervise it (col. 11, lines 57-58 and col. 12, lines 3-17, Menditto discloses a directory within the content gateway which contains a list of server addresses that are capable of servicing the client request).

As per claim **67**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service provider notifies said service location managers that supervise it of said assignment to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said service provider notifies said service location managers that supervise it of said assignment to perform said service (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **68**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service provider notifies said service location managers that supervise it of completion of performance of said service by said service provider.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said service provider notifies said service location managers that supervise it of completion of performance of said service by said service provider (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream

engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **69**, Menditto discloses:

- wherein said service location manager maintains a record comprising identifying information of a second service location manager that also supervises said service provider (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim **70**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service location manager notifies said second service location manager of said assignment of said service provider to perform said service.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said service location manager notifies said second service location manager of said assignment of said service provider to perform said service (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream

engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **71**, Menditto discloses the invention substantially as claims discussed above.

However, Menditto does not explicitly disclose:

- wherein said service location manager notifies said second service location manager of completion of performance of said service by said service provider.

Hospodor discloses a system for servicing streaming media request comprising:

- wherein said service location manager notifies said second service location manager of completion of performance of said service by said service provider (paragraphs 0026-0028 and 0036, Hospodor discloses a stream director node that assigns a stream engine node to service the streaming media request from the client).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Menditto by incorporating or implementing servicing and assigning streaming media requests to a particular service provider (i.e. stream engine node) for the purpose of providing streaming content to a requestor while meeting quality of service constraints [paragraph 0003].

As per claim **72**, Menditto discloses:

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- wherein said service provider is supervised by a first service location manager, and said first service location manager transfers supervision of said service provider to a second service location manager (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim **73**, Menditto discloses:

- wherein said transfer is based on a computational load of said first service location manager (col. 3, lines 51-61, Menditto discloses selecting a server to process the request by determining the load on each server).

As per claim **74**, Menditto discloses:

- wherein said transfer is based on availability of resources of a service provider supervised by said second service location manager (col. 11, lines 57-58 and col. 12, lines 3-17).

As per claim **75**, Menditto discloses:

- wherein said service provider is selected to be supervised by said service location manager based on a network communication condition between said service location manager and said service provider (col. 3, lines 62-67 and col. 4, lines 1-17).

As per claim **76**, Menditto discloses:

- wherein said plurality of service location managers comprises a master service location manager that monitors the status of other service location managers of said plurality of service location managers (col. 3, lines 62-67 and col. 4, lines 1-17).

### ***Response to Arguments***

3. Applicant's arguments filed have been fully considered but they are not persuasive.

#### **The Office notes the following argument(s):**

(a) The suggested combination of Menditto and Hospodor would require a substantial reconstruction and redesign of the elements shown in Meditto because Meditto contains a server which delivers content, whereas Hospodor specifically does not employ a server to service streaming media request.

#### **In response to:**

(a) Hospodor teaches several embodiment in which streaming media requests are serviced. It is well known in the art, according to Hospodor, for streaming object requests to be passed to servers that can service the request. These servers access the nodes on which streaming objects are located in order to deliver the requested data to the requestor (paragraph [0009]). In other embodiments, Hospodor teaches receiving streaming media requests at the stream director and the director locates a stream engine node to which or from which the streaming media is to be transferred (paragraphs [0012, 0026]). Although the "stream director" and "stream engine node"



are not called "servers" in this embodiment, the same function is performed as that of the well-known server. However, in another embodiment, Hospodor teaches the user/client system obtains information from the streaming server in order to send a reserve message to reserve resources (paragraphs [0034, 0038]).

The term "server" is not even in the claim language. The claim language does not teach that a "server" is to perform the limitations.

Hospodor was only brought in to disclose "a streaming media service" and informing said service provider of said assignment to perform said media service component, causing said service provider to prepare to perform said streaming media service on streaming media". These limitation are indeed disclosed by Hospodor (paragraphs [0012, 0014, 0026-0028, 0036]).

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA N. BURGESS whose telephone number is (571)272-3996. The examiner can normally be reached on M-F (8:00am-4:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Barbara N Burgess/  
Examiner, Art Unit 2157

Barbara N Burgess  
Examiner  
Art Unit 2157

May 12, 2008

/Ario Etienne/  
Supervisory Patent Examiner, Art Unit 2157